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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
05/375,414	06/16/97	WICKBOLDT	IL-10092

MM31/0730

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EXAMINER

CHRISTIANSON, K

ART UNIT

2813

PAPER NUMBER

DATE MAILED: 07/30/98

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

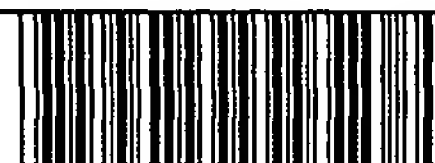
# Office Action Summary

Application No.  
**08/876,414**

Applicant(s)  
**Wickboldt et al.**

Examiner  
**Keith Christianson**

Group Art Unit  
**2813**



☒ Responsive to communication(s) filed on Jun 9, 1998

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-7 and 9-20 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-7 and 9-20 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## **DETAILED ACTION**

### ***Specification***

1. Applicant's amendment of the specification corrects the informality problems noted by the examiner in the first Office Action and accordingly that part of the objection is withdrawn.

However, the abstract is still objected to as describing speculative applications (i.e. potential uses) for the invention.

### ***Claim Objections***

2. Applicant's cancellation of claim 8 and incorporation of that claim into claim 1 including the units of dose corrects the informality problem noted by the examiner in the first Office Action and accordingly the objection is withdrawn.

### ***Claim Rejections - 35 USC § 112***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Applicant's inclusion of --about  $10^2\text{cm}^{-2}$ -- corrects the problem concerning the word "greater", and accordingly the rejection under 35 U.S.C. 112, second paragraph is withdrawn.

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***Claim Rejections - 35 USC § 102***

5. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Narayan et al. (U.S. Patent No. 4,147,563) for reasons of record as set forth in the previous office action in combination with the following remark: In Table I it is clearly shown that a dose or rate of at least  $10^{15} \text{ cm}^{-2}$  is produced by the procedure of Narayan et al.

***Claim Rejections - 35 USC § 103***

6. Claims 2-7 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narayan et al. (U.S. Patent No. 4,147,563) for reasons of record as set forth in the previous office action in combination with the following remarks. No changes to the dependent claims have been made, thus they have been rejected for the reasons of record. Claim 18 has been amended to include a listing of possible doping species from claim 11, which has been rejected previously in response to that claim. Also, in response to the applicant's request for a reference as to fabrication procedures which were discussed previously by the examiner as well known in the art, a copy of Ishida et al. is enclosed (U.S. Patent no. 5,316,969). For example, dopant gases are described in column 1, line 39.

Applicant's arguments filed have been fully considered but they are not persuasive. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the deposition and doping techniques of Narayan et al. along with the deposition, dopant

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atmosphere, laser and ion variations known to one of ordinary skill in the art in order to fabricate semiconductor material with electrically active dopants for inclusion into semiconductor devices.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. The inclusion of the new reference was added as evidence of prior well known art and does not result in a new issue. See MPEP § 2144.03. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith Christianson whose telephone number is (703) 305-4029. The examiner can normally be reached on Monday-Friday from 6:30 AM to 3:00 PM.

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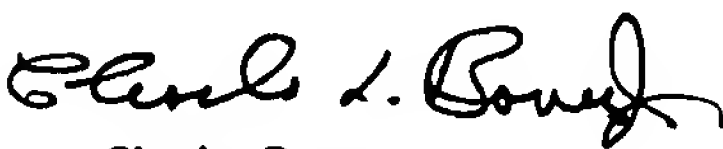
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Bowers, can be reached on (703) 308-2417. The fax phone number for this Group is (703) 305-3432.

KC

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July 22, 1998

  
Charles Bowers  
Supervisory Patent Examiner  
Technology Center 2800